What is claimed is:

1. A method for cell selection comprising the steps of:

(a) providing an azlactone-functional support,

(b) derivatizing the azlactone-functional support with a substance that is biologically active with a desired type of whole cell, wherein the substance is covalently coupled to the azlactone-functional support,

(c) contacting the product of step (b) with a mixture containing the whole cells,

(d) allowing the whole cells in the mixture to interact with and bind to the coupled biologically active substance,

(e) removing a remainder of the mixture from the support, and

(f) optionally, eluting the bound cells from the coupled biologically active substance to produce a purified collection of the whole cells.

2. The method of Claim 1, wherein the azlactone-functional support is selected from the group consisting of a bead, a particulate, a membrane, a blended article, a graft copolymeric article, a woven web, a nonwoven web, a solid plastic article having a surface comprising azlactone moieties, and combinations thereof.

3. The method of Claim 1, wherein the biologically active substance is selected from the group consisting of antibodies, lectins, proteins, antigens, avidin, and combinations thereof.

4. The method of Claim 1, wherein the biologically active substance directly interacts with the whole cells.

5. The method of Claim 1, wherein the biologically active substance indirectly interacts with the whole cells through a second, intermediary biologically active substance that is bifunctional to both the whole cells and the azlactone-functional support.

6. The method of Claim 1, wherein the azlactone-functional support is prepared by processes selected from the group consisting of suspension polymerization processes and dispersion polymerization processes.

7. The method of Claim 6, wherein the azlactone-functional support is prepared from 2-alkenyl azlactone monomers and, optionally, comonomers and crosslinkers.

8. The method of Claim 2, wherein the solid plastic article is a microtitration well, a microtitration plate, a petri dish, medical tubing, a test tube, a centrifuge tube, a beaker, a cuvette, or a body implant.

9. The method of Claim 1, wherein the optional step (f) is used for further biological processing of the whole cells.

10. The method of Claim 1, wherein the mixture is selected from the group consisting of bone marrow and peripheral blood.

11. A purified whole cell population produced by the method of Claim 1.

12. An interacted support, comprising:

(a) an azlactone-functional support,

(b) a biologically active substance covalently coupled to the support, and

(c) a whole cell interacting with said substance.

13. The support of Claim 12, wherein the wherein the azlactone-functional support is selected from the group consisting of a bead, a particulate, a membrane, a blended article, a graft copolymeric article, a woven web, a

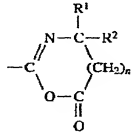
nonwoven web, a solid plastic article having a surface comprising azlactone moieties, and combinations thereof.

14. The support of Claim 12, wherein the biologically active substance is selected from the group consisting of antibodies, lectins, proteins, antigens, avidin, and combinations thereof.

15. The support of Claim 12, wherein the biologically active substance indirectly interacts with the whole cells through a second, intermediary biologically active substance that is bifunctional to both the whole cells and the azlactone-functional support.

16. The support of Claim 13, wherein the solid plastic article is a microtitration well, a microtitration plate, a petri dish, medical tubing, a test tube, a centrifuge tube, a beaker, a cuvette, or a body implant.

17. The support of Claim 12, wherein the azlactone-functional support prior to covalent coupling with the biologically active substance has at least one azlactone-functional group of a formula:



wherein:

R^1 and R^2 independently can be an alkyl group having 1 to 14 carbon atoms, a cycloalkyl group having 3 to 14 carbon atoms, an aryl group having 5 to 12 ring atoms, an arenyl group having 6 to 26 carbon atoms and 0 to 3 S, N, and nonperoxidic O heteroatoms, or R^1 and R^2 taken together with the carbon to which they are joined can form a carbocyclic ring containing 4 to 12 ring atoms, and n is an integer 0 or 1.